

Title (en)
HETEROGENEOUS NESTED INTERPOSER PACKAGE FOR IC CHIPS

Title (de)
HETEROGENE VERSCHACHTELTE INTERPOSER-PACKUNG FÜR IC-CHIPS

Title (fr)
BOÎTIER D'INTERPOSEUR EMBOÎTÉ HÉTÉROGÈNE POUR PUCES DE CI

Publication
EP 4325553 A3 20240522 (EN)

Application
EP 23220595 A 20200310

Priority
• US 201916437254 A 20190611
• EP 20162143 A 20200310

Abstract (en)
Embodiments disclosed herein include electronic packages and methods of fabricating electronic packages. In an embodiment, an electronic package comprises an interposer, where a cavity passes through the interposer, and a nested component in the cavity. In an embodiment, the electronic package further comprises a die coupled to the interposer by a first interconnect and coupled to the nested component by a second interconnect. In an embodiment, the first and second interconnects comprise a first bump, a bump pad over the first bump, and a second bump over the bump pad.

IPC 8 full level
H01L 21/683 (2006.01)

CPC (source: CN EP KR US)
H01L 21/4853 (2013.01 - US); **H01L 21/4857** (2013.01 - US); **H01L 21/486** (2013.01 - US); **H01L 21/565** (2013.01 - US); **H01L 21/568** (2013.01 - US); **H01L 21/6835** (2013.01 - EP); **H01L 23/13** (2013.01 - KR); **H01L 23/29** (2013.01 - KR); **H01L 23/3128** (2013.01 - US); **H01L 23/3185** (2013.01 - KR); **H01L 23/49816** (2013.01 - KR); **H01L 23/538** (2013.01 - CN); **H01L 23/5381** (2013.01 - US); **H01L 23/5384** (2013.01 - KR US); **H01L 23/5385** (2013.01 - EP KR US); **H01L 23/5386** (2013.01 - CN KR US); **H01L 23/5389** (2013.01 - EP KR); **H01L 23/562** (2013.01 - US); **H01L 24/16** (2013.01 - US); **H01L 24/17** (2013.01 - EP); **H01L 24/96** (2013.01 - EP); **H01L 25/0655** (2013.01 - CN EP KR); **H01L 25/18** (2013.01 - CN); **H01L 25/50** (2013.01 - CN EP KR); **H01L 23/13** (2013.01 - EP); **H01L 23/3128** (2013.01 - EP); **H01L 23/49816** (2013.01 - EP); **H01L 24/03** (2013.01 - EP); **H01L 24/05** (2013.01 - EP); **H01L 24/13** (2013.01 - EP); **H01L 24/14** (2013.01 - EP); **H01L 24/16** (2013.01 - EP); **H01L 24/81** (2013.01 - EP); **H01L 24/97** (2013.01 - EP); **H01L 2221/68345** (2013.01 - EP); **H01L 2224/03003** (2013.01 - EP); **H01L 2224/031** (2013.01 - EP); **H01L 2224/03334** (2013.01 - EP); **H01L 2224/0401** (2013.01 - EP); **H01L 2224/04105** (2013.01 - EP); **H01L 2224/05568** (2013.01 - EP); **H01L 2224/0557** (2013.01 - EP); **H01L 2224/05647** (2013.01 - EP); **H01L 2224/06181** (2013.01 - EP); **H01L 2224/13025** (2013.01 - EP); **H01L 2224/131** (2013.01 - EP); **H01L 2224/1403** (2013.01 - EP); **H01L 2224/16145** (2013.01 - EP); **H01L 2224/16227** (2013.01 - EP US); **H01L 2224/16265** (2013.01 - EP); **H01L 2224/16267** (2013.01 - EP); **H01L 2224/17181** (2013.01 - EP); **H01L 2224/18** (2013.01 - EP); **H01L 2224/81005** (2013.01 - EP); **H01L 2224/81191** (2013.01 - EP); **H01L 2224/96** (2013.01 - EP); **H01L 2224/97** (2013.01 - EP); **H01L 2924/18161** (2013.01 - EP); **H01L 2924/3511** (2013.01 - KR US)

C-Set (source: EP)
1. **H01L 2224/97 + H01L 2224/81**
2. **H01L 2224/05647 + H01L 2924/00014**
3. **H01L 2224/131 + H01L 2924/014 + H01L 2924/00014**

Citation (search report)
• [XYI] US 2018374821 A1 20181227 - CHEN WEIMING CHRIS [TW], et al
• [Y] US 2019067035 A1 20190228 - PAEK JONG SIK [KR], et al
• [A] US 2016379915 A1 20161229 - LEE WANG GU [KR], et al
• [A] US 2013099377 A1 20130425 - YU CHEN-HUA [TW], et al
• [A] US 2016064356 A1 20160303 - FOONG CHEE SENG [MY], et al
• [A] US 2016086918 A1 20160324 - LIN JING-CHENG [TW], et al
• [A] KR 101762541 B1 20170728 - AMKOR TECHNOLOGY INC [KR]
• [A] US 2018076122 A1 20180315 - LU WEN-LONG [TW], et al

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3751607 A1 20201216; CN 112071826 A 20201211; CN 117790482 A 20240329; EP 4181193 A1 20230517; EP 4325553 A2 20240221; EP 4325553 A3 20240522; KR 20200141921 A 20201221; KR 20240007894 A 20240117; SG 10202004327Q A 20210128; TW 202101692 A 20210101; TW 202418502 A 20240501; TW I829926 B 20240121; US 11735533 B2 20230822; US 11824018 B2 20231121; US 2020395313 A1 20201217; US 2023134049 A1 20230504; US 2024038687 A1 20240201; US 2024128205 A1 20240418

DOCDB simple family (application)
EP 20162143 A 20200310; CN 202010219085 A 20200325; CN 202311804377 A 20200325; EP 22217054 A 20200310; EP 23220595 A 20200310; KR 20200055123 A 20200508; KR 20230194385 A 20231228; SG 10202004327Q A 20200511; TW 109115221 A 20200507; TW 112150203 A 20200507; US 201916437254 A 20190611; US 202218089227 A 20221227; US 202318380022 A 20231013; US 202318397915 A 20231227